

Pranav Minasandra

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Max Planck Institute of Animal Behavior,
Bücklestraße 5a,
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Interests I am keen on developing and testing novel theories of behaviour in animals and developing methods to answer behavioural questions in creative ways. Particularly, I am interested in the dynamics of behaviour at the fine-scale, and how these dynamics are related to collective or social behaviour.

Education **Max Planck Institute of Animal Behaviour, Konstanz, Germany** 2020 - now
PhD - International Max Planck Research School of Organismal Biology

Indian Institute of Science (IISc), Bengaluru, India 2015 - 2020
- Master of Science in Biology
- Bachelor of Science (Research) with a major in Biology

Publications

1. **Minasandra, P.**, Jensen, F. H., Gersick, A. S., Holekamp, K. E., Strauss, E. D. & Strandburg-Peshkin, A. Accelerometer-based predictions of behaviour elucidate factors affecting the daily activity patterns of spotted hyenas. *Royal Society Open Science* **10**, 230750. doi:[10.1098/rsos.230750](https://doi.org/10.1098/rsos.230750) (2023).
2. Grout, E. M., Ortega, J., **Minasandra, P.**, Quin, M. J., Crofoot, M. C., Strandburg-Peshkin, A. & Hirsch, B. T. Whole Group Tracking Reveals That Relatedness Drives Consistent Subgrouping Patterns in White-Nosed Coatis. preprint. doi:[10.1101/2023.12.14.571650](https://doi.org/10.1101/2023.12.14.571650) (2023).
3. Kunjar, S., Strandburg-Peshkin, A., Giese, H., **Minasandra, P.**, Sarkar, S., Jolly, M. K. & Gradwohl, N. Link updating strategies influence consensus decisions as a function of the direction of communication. *Royal Society Open Science* **10**, 230215. doi:[10.1098/rsos.230215](https://doi.org/10.1098/rsos.230215).
4. **Minasandra, P.** & Isvaran, K. Truncated power-law distribution of group sizes in antelope. *Behaviour* **157**, 541–558. doi:[10.1163/1568539X-bja10012](https://doi.org/10.1163/1568539X-bja10012) (2020).

Awards and fellowships **DAAD - Graduate Student Scholarship Programme** 2020 - now
Nominated after evaluation of my proposal
€1200 per month for 4 years, as well as additional costs

Kishore Vaigyanik Protsahan Yojana 2015 - 2020
All India Rank : 135
Includes stipend and contingency

Mentorship **Amlan Nayak**
Master thesis: Spatial variation of vigilance in meerkats.

Ananya Passi
Summer research: Mathematical modelling of habitat use and population dynamics.

Teaching **Teaching Assistantship** 2019
For the course *Quantitative Ecology: Research Design and Inference*
Assisted with coding in R, conducted several classes, graded assignments, managed course website.

Contributed talks **Descriptive & Normative Models of Collective Behaviour** 2022
School of Mathematics, University of Leeds
“Looking into hyena daily activity patterns using accelerometers”

Animal Behaviour Society - Virtual Seminar 2021

“Behavioural classifier provides insights into spotted hyena behaviour”

2021

**Technical
skills**

Programming languages and related

Python, Julia, R, Bash, L^AT_EX, and C. HTML, CSS, and git.

Specialised computational skills

Parallel processing; Machine learning; Front-end development in R Shiny; Agent-based models.

Mathematical modelling

Models incorporating spatial and stochastic variables; Non-linear dynamics, including population dynamics and evolutionary dynamics; Probability models; Numerical simulations of all the above.

References

Dr Ariana Strandburg-Peshkin,
Max Planck Institute of Animal Behavior
astrandburg@ab.mpg.de

Dr Alex L Jordan,
Max Planck Institute of Animal Behavior
ajordan@ab.mpg.de

Dr Kavita Isvaran,
Indian Institute of Science
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Dr Vishwesha Guttal,
Indian Institute of Science
guttal@iisc.ac.in